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FACSIMILE COVER LETTER

FAX NO

703-308-7722

TO

Lisa Johnson

U.S. Patent and Trademark Office

FROM

Tracy L. Anderson

DATE

September 10, 1999

RE

10020/11901 - U.S. Serial No. 09/136,342

NUMBER OF PAGES INCLUDING COVER:

Ms. Johnson:

Further to our telephone conversation of today, attached please find a copy of the Petition to Make Special Under 37 CFR 1.102 which was filed in the above referenced application on November 19, 1998 together with an Information Disclosure Statement. A copy of the postcard date stamped November 23, 1998 which was received from the Patent Office is also enclosed.

Please make sure that these papers get placed in the corresponding file so that a Decision can be made on the pending Petition.

Thank you for your assistance. Please give me a call to let me know that you have received the above mentioned file and that the enclosed papers have been matched up with same. If you have any questions, please feel free to contact me at 212-908-6467.

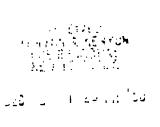
Tracy L. Anderson

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KENJON - KENJON → S0#11301#1J02208JJSS

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CHE No. 10020/11901 Any. GOW 09/136,342 Due Date The Impressed Mail Room date stamp acknowledges receipt of the date indicated of: PRINCETON UNIVERSITY ☐ Extension Request □ Application Amendment ☐ Priority Document ☐ Assignment ☐ Issue Fee Notice of Appeal Declaration Prior Art Statement Small Entity DEP. ACCT. 11-0600 Appeal Brief PETITION TO MAKE SPECIAL UNDER 37 CFR 1.102 11/19/98





Girard College Philadelphia, PA 1848-1998

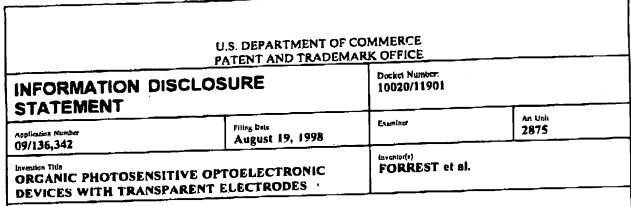
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Address to:

Assistant Commissioner for Patents

Washington D.C. 20231

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Palents, Washington, D.C. 2023) on

Reg. No.43.277

- In accordance with the duty of disclosure under 37 C.F.R. § 1.56 and in conformance with the procedures of 37 C.F.R. §§ 1.97 and 1.98 and M.P.E.P. § 609, attorneys for Applicant hereby bring the artached references to the attention of the Examiner. These references are listed on the attached modified PTO Form No. 1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.
- It is believed that no fees are due in connection with this Information Disclosure Statement. However, should any fees be due, the Commissioner is authorized to charge Deposit Account No. 11-0600 for 2. such fees. A duplicate copy of this communication is enclosed for charging purposes.
- We wish to bring the following related applications to the Examiner's attention: 3.

August 19, 1998 USSN 136,166 filed August 19, 1998 USSN 136,377 filed August 19, 1998 USSN 136.165 filed August 19, 1998 USSN 136,164 filed November 24, 1997 US\$N 976,666 filed November 24, 1997 USSN 977,205 filed November 05, 1997 USSN 054,707 filed November 05, 1997 US\$N 964,863 filed

The applications are listed on the attached PTO 1449 but are not enclosed. A copy of the remaining patents. publications or other information listed on modified PTO form 1449 is enclosed.

Seorgo D. Winborne (Reg. No. 43,277)

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C Kenyon & Kenyon 1998

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APPLICATION NO. ATTY. DOCKET NO. Modified Form PTO-1449 09/136,342 10020/11901 INFORMATION DISCLOSURE APPLICANT STATEMENT BY APPLICANT FORREST et al. GROUP ART UNIT FILING DATE 2875 08/19/1998 U. S. PATENT DOCUMENTS FILING 9UBCLASS CLASS PATENT PATENT DATE' EXAMINER NAME DATE NUMBER INITIAL Mar. 13, 1978 Tang et al. Nov. 14, 1978 4,125,414 May 18, 1978 Tang Aug. 14, 1979 4.164,431 Dec. 31, 1979 Proms Dec. 31, 1979 4,255,211 May 1, 1991 Porrest ct al. May 24, 1994 5,315,129 Nov. 16, 1993 Namiki et di. Oct. 10, 1995 5,457,565 Mar. 6. 1996 Forrest et al. Dec. 30, 1997 5,703,436 Sep. 20, 1996 Haight et al. Feb. 3, 1998 5,714,83B - If appropriate FOREIGN PATENT DOCUMENTS TRANSLATION DOCUMENT NO EXAMINER **SUBCLASS** CLAS5 COUNTRY DATE NUMBER INITIAL

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· Abstract

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Sheet 2 of 3

OTHER DOCUMENTS

EXAMINER	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
INITIAL	FORREST et al., U.S. Patent Appln. Serial No.136,166, "Organic Photosensitive Optoelectronic Devices With A Top Transparent Electrode", filed August 19, 1998
	 FORREST et al., U.S. Patent Appln. Scrial No.136,377, "Stacked Organic Photosensitive Optoelectronic Devices With An Electrically Settes Configuration". filed August 19, 1998
	 FORREST et al., U.S. Potent Appln. Serial No.136,165, "Stocked Organic Photosensitive Optoelectronic Devices With An Electrically Parallel Configuration", filed August 19, 1998
	FORREST et al., U.S. Patent Applin. Serial No.136,164, "Organic Photosensitive Optoelectronic Devices With A Mixed Electrical Configuration", filed August 19, 1998
	 FORREST et al., U.S. Patent Appln. Serial No. 976,666, "Method for Deposition and Patterning of Organic Thin Film". Ried Nov. 24, 1997
	FORREST et al., U.S. Patent Appln. Script No., 977,205, "Method of Fabricating and Patterning OLEDs". filed Nov. 24, 1997
	PARTHASARATHY et al., U.S. Patent Apple. Serial No. 054,707, "Highly Transparent Non-Metallic Cathodes". filed Apr. 3, 1998
	PARTHASARATHY et al., U.S. Patent Appin. Serial No. 08/964.863, "A Highly Transparent Organic Light Emitting Device Employing a Non-metallic Cathode, " filed Nov. 5, 1997.
	M. HIRAMOTO et al., "Effect of Thin Gold Interstitial-layer on the Photovoltaic Properties of Tundem Organic Solar Cell". Chemistry Letters, pp. 327-330 (1990).
	 N. KARL et al, "Efficient Organic Photovoltaic Colls. The Role of Excitonic Light Collection, Exciton Diffusion to Interfaces, Internal Rields for Charge Separation, and High Charge Carrier Mobilities", Mol. Cryst. Liq. Cryst., Vol. 252, pp. 243-258 (1994).
	O. JORGENSEN et al., "Polymers for Solar-Boergy Devices", American Chemical Society. Desk Reference of Functional Polymers. Syntheses and Applications, Chapter 4.2, pp. 567-588 (1997)
	 1. KANICKI, "Polymeric Semiconductor Contacts and Photovoltaic Applications, Hamiltonk of Conducting Polymers, Vol. 1., Chapter 17, pp. 544-660 (1986).
	 C. ARBOUR of al., "Surface Chemistries And Photoelectrochemistries Of Thin Molecular Semiconductor Materials". Mol. Cryst. Liq. Cryst., Vol. 183, pp. 307-320 (1990).
	 7.B. WHITLOCK et al., "Investigations of Materials and Device Structures for Organic Semiconductor Solar Cells". Optical Engliseoring, Vol. 32, No. 8, pp. 1921-1934 (Aug. 1993).
	 S.R. FORREST et al., "Optical And Electrical Properties of Isotype Crystalline Molecular Organic Heterojunctions". J. Appl. Phys. Vol. 66, No. 12, pp. 5908-5914 (Dec. 1989).
	O. YU, et al., "Photovoltaic Cells Made With Organic Composites", Proceedings of the Future Generation Photovoltaic Technologies: First NREL Conference, Match 1997, American Inst. of Physics, pp. 317-324.
	V. BULOVIC et al., "Photovoltaic Cells Based on Vacuum Deposited Molecular Organic Thin Films", Proceedings the Future Generation Photovoltaic Technologies: First NREL Conference, March 1997, American Inst. of Physics, p. 235-242.
	National Renewal Energy Laboratory, "Research Opportunities in Photochemical Sciences - Workshop Proceedings - Panel A-1 "Photo Electrochemical and Organic-Based Solar Cells" pp. 142-185, Estes Park, CO, Feb. 5-8, 1996, NREL/CP-450-21097, D696007867.
	G. YU et al., "Semiconducting Polymers as Materials for Device Applications", 23rd Int'l Conf. On The Physics of Semiconductors, Vol. 1, pp. 35-42, World Scientific, Berlin, Germany, Jul. 21-26, 1996.

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Sheet 3 of 3

EXAMINER	AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.
INITIAL	Uni-Solar Bnergy Generation, http://ovonic.com/engentek.html (Jan. 26, 1998).
	S.R. FORREST, "Very High Efficiency Photovoltaic Cells Based on Fully Organic Multiple Quantum Wells", National Renewable Energy Lab, Quarterly Technical Progress Report. 15 Fcb. 1995 - 15 May 1995, (Mar. 1997) NREL/SR-520-21882, DE97000063.
	S.R. FORREST, "Ultrathin Organic Films by Organic Molecular Beam Deposition and Related Techniques," Chemical Reviews, American Chemical Society, Vol. 97, No. 6, pp. 1793-1896, September/October 1997.

1			DATE CONSIDERED
	EXAMINER		
1			

EXAMINER: Initial if citation considered, whether or not citation is in conformance with M.P.E.P. 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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10020/11901

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): FORREST, et al.

Serial No.: 09/136,342

Filing Date: August 19, 1998

For: ORGANIC PHOTOSENSITIVE

OPTOELECTRONIC

DEVICES WITH TRANSPARENT

ELECTRODES

Group Art Unit: 2875

Examiner:

Honorable Commissioner of Patents and Trademarks Washington D.C. 20231

PETITION TO MAKE SPECIAL UNDER 37 C.F.R. \$1.102

SIR:

Applicants hereby petition to have the above-identified patent application made special on the ground that the invention, as disclosed and claimed, materially contributes to the development of energy resources and the more efficient utilization and conservation of energy resources. See 37 C.F.R. §1.102(c) and M.P.E.P. §708.02, subsection VI. It is believed that no fees are due in connection with this Petition. If, however, such fees are required, the Commissioner is hereby authorized to charge Kenyon & Kenyon's Deposit Account No. 11-0600 for that purpose.

The technology of the present invention, known as "organic photosensitive optoelectronic device" or "OPOD" technology, makes use of organic materials that convert electromagnetic radiation into electricity. The organic materials are typically arranged as thin layers between electrodes. A voltage may be generated across the electrodes when the OPOD is irradiated, or in other applications the effective resistance across the electrodes may be reduced resulting in an increased current through the OPOD.

OPOD technology has application in photovoltaic energy generation devices, i.e., solar cells. OPODs according to the present invention have increased efficiency of

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energy generation due to the novel transparent electrode configurations and multilayer devices possible with the invention presently disclosed. The transparent top electrode configurations permit admission of light into an OPOD on the side opposite the substrate so that a variety of light weight, flexible substrate materials such as plastic may be used. This makes energy conserving solar cell technology available for a greater number of practical applications. The stacked multicell OPODs of the present invention permit optimization of the "fill factor" associated with such solar cell devices to provide optimum energy conversion efficiency coupled with selectable voltage and current levels. Additionally, the stacking capabilities of the present invention permit the optimization of the OPOD configuration for the anticipated radiation intensity, e.g., the brightness of the expected ambient light, thus producing increased energy conversion efficiency.

In addition, the OPODs of the present invention have application as energy efficient photodetectors, using reduced power for detection of electromagnetic radiation due to the novel transparent electrode and multicell configurations disclosed in the instant application. Such highly efficient photodetectors can be utilized in household and industrial applications such as security, monitoring and inspection equipment to reduce energy use in those applications.

It is respectfully submitted that all of the requirements of M.P.E.P. §708.02 VI have been satisfied. It is submitted that the OPODs of the present invention qualify under both categories (1) (development of energy resources), and (2) (more efficient utilization and conservation of energy resources) of M.P.E.P. §708.02 VI. Accordingly, it is respectfully requested that this Petition be granted and that an accelerated examination of the above-identified application be ordered.

Dated: 11/19/93

y: Dery

George O. Winborne Reg. No. 43,277

KENYON & KENYON One Broadway New York, NY 10004 (212) 425-7200 (tel.) (212) 425-5288 (fax)

Doc #23631

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): FORREST, et al.

Serial No.: 09/136,342

Filing Date: August 19, 1998

For: ORGANIC PHOTOSENSITIVE

OPTOELECTRONIC

DEVICES WITH TRANSPARENT

ELECTRODES

Group Art Unit: 2875

Examiner:

Honorable Commissioner of Patents and Trademarks Washington D.C. 20231

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Dated: 11/19/93

By:

Reg. No. 43,277

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Doc #23631